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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,036	08/30/2001	Junji Tominaga	325772026700	7287
25227	7590	10/05/2004		
MORRISON & FOERSTER LLP 1650 TYSONS BOULEVARD SUITE 300 MCLEAN, VA 22102			EXAMINER ORTIZ CRIADO, JORGE L	
			ART UNIT 2655	PAPER NUMBER

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,036

Applicant(s)

TOMINAGA ET AL.

Examiner

Jorge L Ortiz-Criado

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Izumi et al. U.S. patent No. 5,610,985.

Regarding claim 1, Izumi et al. discloses an apparatus for reproducing information stored in an optical recording medium which comprises marks or pits which are arranged at a pitch less than $\lambda/2NA$, wherein λ is a wavelength of light used for reproduction and NA is an numerical aperture of an objective lens (See col. 1, lines 10-15, col. 2, lines 4-14; Fig. 4; Fig. 10), said apparatus comprising:

a shielding band which is located in an optical path of an optical system for detecting light coming from the optical recording medium in such a position to shield at least a middle of a bundle of rays (See col. 2, line 58 to col. 3, line 10; col. 3, line 65 to col. 4, line 30; Fig. 4, ref# 5; Fig. 6A; Fig.10; ref#25B)

Regarding claim 2, Izumi et al. discloses an apparatus for reproducing information stored in an optical recording medium which comprises marks or pits which are arranged at a pitch less than $\lambda/2NA$, wherein λ is a wavelength of light used for reproduction and NA is an numerical aperture of an objective lens (See col. 6, line 38 to col. 7, line 20; Fig. 10), said apparatus comprising:

a first detecting system for generally detecting optical signals from marks or pits which are arranged at a pitch not less than $\lambda/2NA$ (See col. 6, line 38 to col. 7, line 20; Fig. 10-“39”);

a second detecting system for generally detecting optical signals from marks or pits which are arranged at a pitch less than $\lambda/2NA$ (See col. 6, line 38 to col. 7, line 20; Fig. 10-“42”, “43”); and

a signal processing circuit for reproducing information by combining the signals detected by the first detecting system with the signals detected by the second detecting system (See col. 6, line 38 to col. 7, line 20 “signal detection system”).

Regarding claim 3, Izumi et al. discloses wherein the second detecting system comprises a shielding band for shielding at least a middle of a bundle of rays (See col. 6, line 38 to col. 7, line 20; Fig. 10-“25B”)

Regarding claim 4, Method claim 4 is drawn to the method of using the corresponding apparatus claimed in claim 2 or 3. Therefore method claim 4 corresponds to the apparatus claim 2 or 3 and is rejected for the same reason of anticipation as used above.

3. Applicant's arguments filed 06/15/2004 have been fully considered but they are not persuasive.

Applicants argue that Izumi fails to teach or suggest the feature “mark or pits arranged at a pitch less than $\lambda/2NA$ ”.

The Examiner cannot concur because Izumi does not expressly disclose “a pitch less than $\lambda/2NA$ ”. Applicant acknowledged that Izumi discloses “High density recording in a recording medium”.

Izumi also discloses an apparatus for reproducing information stored in an optical recording medium, which comprises marks or pits of a “**super-resolution**” recording medium (see col. 2, lines 5-14; Fig. 3, ref# 50, Fig. 6, ref# 50).

The **mark or pits arranged at a pitch less than $\lambda/2NA$** is well known as a “**super – resolution**” optical disk. In page 1, paragraph [004], Applicant’s admitted prior art, clearly states that a recording medium having mark or pits arranged at a pitch less than $\lambda/2NA$, is merely a **super-resolution** optical disk.

Applicants argue that Izumi fails to teach or suggest the feature of the second detecting system comprises a shielding band for shielding at least a middle of a bundle of rays.

The Examiner cannot concur because Izumi discloses wherein the layer 25B is similar to the shielding portion 5B, which shields the bundles of rays of the second detecting system (Fig. 10-“42”, “43”) Hence, the middle bundle of rays is shielded. (See col. 6, line 38 to col. 7, line 20 Fig. 4, ref# 5; Fig. 6A; Fig.10; ref#25B)

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

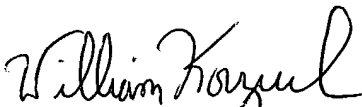
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge L Ortiz-Criado whose telephone number is (703) 305-8323. The examiner can normally be reached on Mon.-Thu.(8:30 am - 6:00 pm), Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris H To can be reached on (703) 305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2655

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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